AMENDMENTS TO THE SPECIFICATION

Please replace the fourth paragraph on page 6 of the Specification as filed with the following paragraph:

Accordingly, another aspect of the present invention contemplates a method for identifying a population of T-cells, said method comprising obtaining a sample comprising $CD4^+$ T-cells and subjecting said $CD4^+$ T-cells ~~and subjecting said CD4+ T-cells~~ to surface marker discrimination means on the basis of levels, presence or absence of CMRF-35 epitope and CD45RO marker and optionally CXCR3.

Please delete the second paragraph on page 8 of the Specification as filed.

Please replace the third paragraph on page 6 of the Specification as filed with the following paragraph:

Figure 2~~3~~ is a graphical representation showing dot blot analysis. Human peripheral blood T lymphocytes were purified into the CMRF-35^+CD4^+ and CMRF-35^-CD4^+ T lymphocyte populations activated with PMA/ionomycin for four hours. GolgiPlug was added for the last 2 hours before cell populations were assayed for intracellular IFNγ staining. Results are from one of 3 representative experiments.

Please delete the fourth paragraph on page 8 of the Specification as filed.

Please replace the third paragraph on page 6 of the Specification as filed with the following paragraph:

Figure 3~~5~~ is a graphical representation of the intensity of CD95 staining. Human peripheral blood T lymphocytes were purified into the CMRF-35^+CD4^+ and CMRF-35^-CD4^+ T lymphocyte populations activated with immobilized CD3/CD28 antibodies overnight. Cell populations were assayed for CD95 staining. Results are from one experiment.

Please replace the third paragraph on page 6 of the Specification as filed with the following paragraph:

Figure 4~~6~~ is a graphical representation of a dot blot analysis. PBMCs from a normal donor and a patient with psoriasis were analyzed using flow cytometry. CD4+ T cells were stained for the

expression of CXCR3 and CMFR-35. Analysis revealed that patients with psoriasis had significantly reduced levels of $CXCR3^{+}$ $CMRF35^{++}$ $CD4^{+}$ T cells.

Please replace the third paragraph on page 12 of the Specification as filed with the following paragraph:

Accordingly, another aspect of the present invention contemplates a method for identifying a population of T-cells, said method comprising obtaining a sample comprising $CD4^{+}$ T-cells and subjecting said $CD4^{+}$ T-cells to surface marker discrimination means on the basis of levels, presence or absence of CMRF-35 epitope and CD45RO marker and optionally $CXCR3^{+}$~~CDCR3*~~.

Please replace the first paragraph on page 13 of the Specification as filed with the following paragraph:

Accordingly, another aspect of the present invention contemplates a method of identifying a potential or risk of a particular condition being present or developing said method comprising collecting a sample of blood and subjecting the sample to surface marker discrimination means to identify the level, presence or absence of a $CD4^{+}$ T-cell population selected from:

$CMRF\text{-}35^{++}$ $CD45RO^{+}$;

$CMRF\text{-}35^{+}$ $CD45RO^{+}$;

CMRF-35-$CD45RO^{+}$ $CMRF\text{-}35^{+}$ $CD45RO^{-}$;

and CMRF-$35^{-}CD45RO^{-}$T-cells;

wherein an alteration in the levels, presence or absence of one or more of the above T-cell populations is indicative of a disease condition or the propensity for a disease condition to develop. As above, the CMRF-35^{++} $CD45RO^{+}$ population may also be $CXCR3^{+}$~~CDCR3*~~.

Please replace the first paragraph on page 88 of the Specification as filed with the following paragraph:

The CMRF-35 mAb is described by Daish et al, 1993 Supra. ~~Directly~~ PE, FITC, PerCP or APC conjugated antibodies for CD3, CD19, CD14, CD34, HLA-DR, CD62L, CD49d, CD25, CD4, CD45RO, IgG1 controls were obtained from BD Biosciences (San Jose, CA). CD56-PE, CD28-PE and CD38-Pe were obtained from BD Pharmingen. CXCR3-FITC and CCR7-FITC were

obtained from R&D Systems (UK). Sheep anti mouse-PE and FITC conjugates were obtained from Chemicon (Melbourne).

Please delete the third paragraph, i.e., lines 23-26, on page 88 of the Specification as filed.

Please replace the second header and the last paragraph on page 89 of the Specification as filed with the following header and paragraph:

Allogeneic Mixed Leucocyte ~~Lueococyte~~ reactions (MLR)

Lin^- $HLA\text{-}DR^+$ dendritic cells (DC) were purified from the ER-fraction of the PBMCs using magnetic bead immunodepletion followed by negative selection on the FACS Vantage. ER-cells were labeled with CD14 (CMRF-31), CD19, CD56, CD34. Following washing, the cells were incubated with Biomag goat anti-mouse-immunoglobulin-coated magnetic beads (Polysciences Warrington, PA, USA). Labeled cells were depleted by first pre-clearing with a MCP-1 magnet (Dynal, Oslo, Norway) followed by passing through a MACS CS column on a Variomacs magnet (Miltenyi Biotech, Gladbach, Germany). To obtain highly purified DC, the immunodepleted cells were ~~cellswere~~ labeled with CD64-PE, CD20-PE, CD1 lb-PE and HLA-DR-APC. The cells were sorted by the FACS Vantage and the HLA^-DR^+, Lino population collected.

Please replace the first paragraph on page 91 of the Specification as filed with the following paragraph:

Intracellular staining for cytokines was as per the manufacturer's instructions (Fix/Perm Kit, CALTAG LABORATORIES) except for the intracellular labeling incubation step, where samples were incubated at 4°C instead of the recommended room temperature (as per ~~recommendations~~ Pharmingen recommendations for their antibodies). Cells were surface labeled with CD25 using directly conjugated mAb (BD Biosciences). Protein transport was inhibited using Golgi Plug (Trademark; Pharmingen) and stained for intracellular cytokines with IL 10-PE, IL4-PE and IFN-γ-FITC or IFN-γ-PE (Pharmingen).

Please replace the first paragraph on page 95 of the Specification as filed with the following paragraph:

A difference in function between the $CMRF\text{-}35^+$ T lymphocyte population and the $CMRF\text{-}35^-$T lymphocyte population was assessed by the ability of each population to respond to Lin^-HLA-

DR^+ stimulators in a MLR. The $CD3^+CMRF\text{-}35^-$ (Figure 2A), the $CD4^+CMRF\text{-}35^-$ ~~(Figure xb)~~ or the subpopulations showed a greater proliferative ability than the $CD3^+CMRF\text{-}35^+$ or $CD4^+CMRF\text{-}35^+$ populations of T lymphocytes. As the $CMRF\text{-}35^+$ cells were prepared by positive selection, a control was used were mAb labeled cells that had been through the flow cytometer without sorting were compared to the sorted populations and labeled T lymphocytes. No significant difference was seen between the labeled and unlabeled T lymphocytes.

Please replace the second header and the second paragraph on page 95 of the Specification as filed with the following header and paragraph:

EXAMPLE ~~EXMAPLE~~ 13

$CD3^+$ $CD4^+$ $CMRF\text{-}35^+$ subset is less responsive to in vitro activation signals than the $CD3^+$ $CD4^+$ $CMRF\text{-}35^-$ subset

The stimulator cells in the MLR were Lin-HLA-DR+ blood DC which are also $CMRF\text{-}35^+$. In vitro activation of T lymphocytes was used as a single cell system thus removing any influence of CMRF-35 activity on the stimulators. Purified $CD4^+CMRF\text{-}35^+$ and $CD4^+CMRF\text{-}35^-$ populations of $CD4^+$ T lymphocytes were activated in vitro with either PMA/ionomycin or immobilized CD3/CD28 mAb and compared to unfractionated T lymphocytes. The $CMRF\text{-}35^+$ subset incorporated lower levels of [^{3}H]-thymidine than the CMRF-35'fractions or unseparated fractions ~~(Figure 2B)~~. Activation of the $CMRF\text{-}35^+$ and CMRF-35-populations was assessed by upregulation of CD25 and CD69. Whilst all populations appeared to show similar levels of CD69 upregulation after 24 hours ~~(Figure 2C)~~ when treated with PMA/ionomycin or immobilized CD3/CD28 the upregulation of CD25 differed between populations. The $CMRF\text{-}35^+$ population upregulated CD25 to a greater extent than the $CMRF\text{-}35^-$ population following treatment. Activation of the $CMRF\text{-}35^-$ population was similar to activation of the unfractionated T lymphocytes.

Please replace the first full paragraph on page 97 of the Specification as filed with the following paragraph:

$CMRF\text{-}35^+$ and CMRF-35-CD4+T lymphocytes were activated *in vitro* in the presence of exogenous IL-2. It was noted that ~~As seen in Figure 2,~~ the presence of excess IL-2 did not restore the proliferative capacity of the $CMRF\text{-}35^+$ $CD4^+$T lymphocytes to that of the $CMRF\text{-}35^-$ $CD4^+$ T lymphocytes. Thus the lack of proliferation seen is not due to lymphokine deprivation.

Please replace the paragraph that spans pages 97-98 of the Specification as filed with the following paragraph:

In vitro activated CMRF-35$^+$ and CMRF-35$^-$CD4$^+$ T lymphocytes were stained with annexin V-EGFP and propidium iodide and assessed for apoptotic cells. Following *in vitro* activation with either PMA/ionomycin or CD3/CD28, the CMRF-35$^+$ CD4$^+$ T lymphocyte population was more susceptible to apoptosis than the CMRF-35$^-$CD4$^+$ T lymphocytes and range between 70-80% of the CMRF-35$^+$CD4$^+$ population compared to 43-63% of the CMRF-35$^-$CD4$^+$ population. The differences in the susceptibility of the CMRF-35$^+$ CD4$^+$ T lymphocyte compared to CMRF-35$^-$ CD4$^+$ T lymphocyte to undergo apoptosis was apparent by 4 hours when PMA/ionomycin was used to activate the cells ~~(Figure 4)~~. Similarly activation with CD3/CD28 mAb caused an increase in the number of cells undergoing apoptosis in the CMRF-35$^+$ CD4$^+$ T lymphocyte population compared to the CMRF-35$^-$CD4$^+$ T lymphocyte population.

Please replace the second header and the second full paragraph on page 98 of the Specification as filed with the following header and paragraph:

EXAMPLE 19

CMRF-35$^+$ ~~CD45RO$^+$~~ CXCR3$^+$ T cells are depleted from the peripheral blood of patients with psoriasis

Using the same method as disclosed in Example 2~~above identified methods~~, PBMCs were isolated from the peripheral blood of normal donors and patients with psoriasis, and the CD4+ T cells stained for CMRF-35 and CXCR3. Analysis demonstrated that the CMRF-35^{++}/CXCR3 population of cells is significantly reduced in the peripheral blood of patients with psoriasis, compared to normal controls (Figure 6).

Please replace the first paragraph on page 99 of the Specification as filed with the following paragraph:

Populations of CMRF-35^{Hi}CD4$^+$CD45RO$^+$ peripheral blood cells were ~~wee~~ analysed in various disease states. The following diseases were tested: Breast cancer, Multiple myeloma, Non Hodgkin's lymphoma, Rheumatoid arthritis, Thyrotoxicosis, SLE, IgA Nephropathy, Idiopathic Thromboctyopenia ~~Thrombocyopenia~~ Purpura, Hashimoto's thyroiditis ~~throiditis~~, Coeliac

Disease and Graves' ~~Graves~~ Disease. There was no similar change in the $CD4^{+}CD45RO^{++}CMRF\text{-}35^{++}$ population in any of these diseases ~~duseases~~ as seen for psoriasis.

Please replace the first paragraph on page 100 of the Specification as filed with the following paragraph:

The level of binding of the CMRF-35 mAb (MF1) to lymphocytes from psoriasis ~~psorasis~~ patients shows a great range than those from normal donors (Table 5).